

## **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing of Claims:**

- 1           1. (Currently amended) A method for allocating computer system  
2 resources between concurrently executing workloads, comprising:  
3           establishing a first resource pool that specifies requirements for each of a  
4 plurality of different computer system resources, wherein the plurality of different  
5 computer system resources are components of a single computer system, and  
6 wherein establishing the first resource pool involves establishing minimum and  
7 maximum requirements for a given resource;  
8           allocating the plurality of different computer system resources to one or  
9 more resource pools, including the first resource pool, to create a resource  
10 allocation, wherein requirements of the first resource pool are satisfied, wherein  
11 prior to allocating the plurality of different computer system resources, the method  
12 further comprises:  
13                         verifying that collective requirements of the one or more  
14                         resource pools can be satisfied, and  
15                         if the collective requirements cannot be satisfied, signaling  
16                         an error condition; and  
17           wherein resources allocated to the first resource pool can change over  
18 time; and  
19           binding a first process to the first resource pool, so that the first process  
20 has access to the plurality of different computer system resources allocated to the  
21 first resource pool.

1           2. (Original) The method of claim 1, wherein allocating the plurality of  
2 different computer system resources to one or more resource pools involves:  
3           partitioning each of the plurality of different computer system resources  
4 into one or more partitions, wherein a first partition is associated with a first  
5 resource and a second partition is associated with a second resource;  
6           allocating the first partition to a single resource pool, so that only  
7 processes associated with the single resource pool can access the first partition;  
8 and  
9           allocating the second partition to multiple resource pools so that processes  
10 associated with the multiple resource pools can share the second partition.

1           3 (Canceled).

1           4. (Original) The method of claim 1, wherein establishing the first  
2 resource pool involves selecting a file containing a representation of the first  
3 resource pool from a plurality of possible files.

1           5. (Original) The method of claim 1, further comprising storing a  
2 representation of the resource allocation to non-volatile storage so that the  
3 resource allocation can be reused after a machine failure.

1           6. (Original) The method of claim 5, wherein storing the representation of  
2 the resource allocation involves storing a representation of each of the one or  
3 more resource pools along with associated resources.

1           7. (Original) The method of claim 5, wherein storing the representation of  
2 the resource allocation involves storing an Extensible Markup Language (XML)  
3 representation of the resource allocation.

1           8. (Original) The method of claim 1,  
2           wherein the first resource pool is associated with a first project; and  
3           wherein the first process is one of a plurality of processes associated with  
4           the first project.

1           9 (Canceled).

1           10. (Original) The method of claim 1, further comprising dynamically  
2           adjusting the resource allocation during system execution.

1           11. (Original) The method of claim 1, wherein the plurality of different  
2           computer system resources can include:  
3           central processing units;  
4           semiconductor memory;  
5           swap space; and  
6           networking resources.

1           12. (Currently amended) A computer-readable storage medium storing  
2           instructions that when executed by a computer cause the computer to perform a  
3           method for allocating computer system resources between concurrently executing  
4           workloads, the method comprising:  
5           establishing a first resource pool that specifies requirements for each of a  
6           plurality of different computer system resources, wherein the plurality of different  
7           computer system resources are components of a single computer system, and  
8           wherein establishing the first resource pool involves establishing minimum and  
9           maximum requirements for a given resource;  
10          allocating the plurality of different computer system resources to one or  
11          more resource pools, including the first resource pool, to create a resource

12 allocation, wherein requirements of the first resource pool are satisfied, wherein  
13 prior to allocating the plurality of different computer system resources, the method  
14 further comprises:  
15 verifying that collective requirements of the one or more  
16 resource pools can be satisfied, and  
17 if the collective requirements cannot be satisfied, signaling  
18 an error condition; and  
19 wherein resources allocated to the first resource pool can change over  
20 time; and  
21 binding a first process to the first resource pool, so that the first process  
22 has access to the plurality of different computer system resources allocated to the  
23 first resource pool.

1 13. (Original) The computer-readable storage medium of claim 12,  
2 wherein allocating the plurality of different computer system resources to one or  
3 more resource pools involves:  
4 partitioning each of the plurality of different computer system resources  
5 into one or more partitions, wherein a first partition is associated with a first  
6 resource and a second partition is associated with a second resource;  
7 allocating the first partition to a single resource pool, so that only  
8 processes associated with the single resource pool can access the first partition;  
9 and  
10 allocating the second partition to multiple resource pools so that processes  
11 associated with the multiple resource pools can share the second partition.

1 14 (Canceled).

1           15. (Original) The computer-readable storage medium of claim 12,  
2 wherein establishing the first resource pool involves selecting a file containing a  
3 representation of the first resource pool from a plurality of possible files.

1           16. (Original) The computer-readable storage medium of claim 12,  
2 wherein the method further comprises storing a representation of the resource  
3 allocation to non-volatile storage so that the resource allocation can be reused  
4 after a machine failure.

1           17. (Original) The computer-readable storage medium of claim 16,  
2 wherein storing the representation of the resource allocation involves storing a  
3 representation of each of the one or more resource pools along with associated  
4 resources.

1           18. (Original) The computer-readable storage medium of claim 16,  
2 wherein storing the representation of the resource allocation involves storing an  
3 Extensible Markup Language (XML) representation of the resource allocation.

1           19. (Original) The computer-readable storage medium of claim 12,  
2 wherein the first resource pool is associated with a first project; and  
3 wherein the first process is one of a plurality of processes associated with  
4 the first project.

1           20 (Canceled).

1           21. (Original) The computer-readable storage medium of claim 12,  
2 wherein the method further comprises dynamically adjusting the resource  
3 allocation during system execution.

1           22. (Original) The computer-readable storage medium of claim 12,  
2 wherein the plurality of different computer system resources can include:  
3           central processing units;  
4           semiconductor memory;  
5           swap space; and  
6           networking resources.

1           23. (Currently amended) An apparatus that allocates computer system  
2 resources between concurrently executing workloads, comprising:  
3           an establishment mechanism that is configured to establish a first resource  
4 pool that specifies requirements for each of a plurality of different computer  
5 system resources, wherein the plurality of different computer system resources are  
6 components of a single computer system, and wherein the establishment  
7 mechanism is configured to establish minimum and maximum requirements for a  
8 given resource;  
9           an allocation mechanism that is configured to allocate the plurality of  
10 different computer system resources to one or more resource pools, including the  
11 first resource pool, to create a resource allocation, wherein requirements of the  
12 first resource pool are satisfied, and wherein resources allocated to the first  
13 resource pool can change over time;  
14           a verification mechanism that is configured to verify that collective  
15 requirements of the one or more resource pools can be satisfied;  
16           wherein if the collective requirements cannot be satisfied, the verification  
17 mechanism is configured to signal an error condition; and  
18           a binding mechanism that is configured to bind a first process to the first  
19 resource pool, so that the first process has access to the plurality of different  
20 computer system resources allocated to the first resource pool.

1           24. (Original) The apparatus of claim 23, wherein the allocation  
2 mechanism is configured to:  
3           partition each of the plurality of different computer system resources into  
4 one or more partitions, wherein a first partition is associated with a first resource  
5 and a second partition is associated with a second resource;  
6           allocate the first partition to a single resource pool, so that only processes  
7 associated with the single resource pool can access the first partition; and to  
8           allocate the second partition to multiple resource pools so that processes  
9 associated with the multiple resource pools can share the second partition.

1           25 (Canceled).

1           26. (Original) The apparatus of claim 23, wherein the establishment  
2 mechanism is configured to select a file containing a representation of the first  
3 resource pool from a plurality of possible files.

1           27. (Original) The apparatus of claim 23, further comprising an archiving  
2 mechanism that is configured to store a representation of the resource allocation to  
3 non-volatile storage so that the resource allocation can be reused after a machine  
4 failure.

1           28. (Original) The apparatus of claim 27, wherein the archiving  
2 mechanism is configured to store a representation of each of the one or more  
3 resource pools along with associated resources.

1           29. (Original) The apparatus of claim 27, wherein the archiving  
2 mechanism is configured to store an Extensible Markup Language (XML)  
3 representation of the resource allocation.

1           30. (Original) The apparatus of claim 23,  
2           wherein the first resource pool is associated with a first project; and  
3           wherein the first process is one of a plurality of processes associated with  
4           the first project.

1           31 (Canceled).

1           32. (Original) The apparatus of claim 23, further comprising an adjustment  
2           mechanism that is configured to dynamically adjust the resource allocation during  
3           system execution.

1           33. (Original) The apparatus of claim 23, wherein the plurality of different  
2           computer system resources can include:  
3           central processing units;  
4           semiconductor memory;  
5           swap space; and  
6           networking resources.